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# **UNIX**

## **SECTION C-2**

## C-2 UNIX

### C-2.1 INTRODUCTION

PRISM operates under the UNIX operating system environment. Most PRISM functions are run from menus and screens, so most PRISM users will not need to know much about the UNIX command language. But there are several commands described in this chapter which you may find useful at some time.

UNIX has a very wide collection of commands. In this chapter we will illustrate the more frequently used commands and options. It should be kept in mind that many commands and options are available and that only a few of the most useful examples are shown.

To further enrich your knowledge of UNIX and its capabilities, there are a large number of books. Two that we have found helpful are 'UNIX, System V Primer' and the example-filled 'UNIX For Dummies'.

### C-2.2 UNIX FILE STRUCTURE

**File name:**

A filename has no character limit. Avoid the special characters, especially (/, !, @, #, \$, ^, &, \*, -, (, ), +, ', ", \, |, and ?). Spaces are not allowed in a filename. For clarity when naming files, separate parts of the name with a '.', for example 'actual.jan.obl'.

**Full path name:**

In NOS/VE, to identify a file, the structure would look like "\$user.reports.filex". In UNIX it would look like "\$HOME/reports/filex". Notice that directories are separated by a forward slash, '/'.

**Cycle number:**

PRISM report output and status files written to your \$HOME/reports directory have a file cycle number appended to their name. The latest file has the highest number. For example, if 'conlstrpt\_out' appears only once in your directory, no file cycle number will appear. If there is more than one conlstrpt\_out file they will appear as 'conlstrpt\_out.1, conlstrpt\_out.2, etc.'.

## C-2.3 PRISM FUNCTIONS MENU

```

      U S   A R M Y   C O R P S   O F   E N G I N E E R S
      -----
      |   P R I S M   F U N C T I O N S   M E N U   |
      -----

      Select the function you wish to perform.

      1. Enter PRISM Production Application   (Production Database)
      2. Enter SQL*Plus for Query             (Production Database)
      3. Exit to UNIX Environment
      4. Logout

      Enter Your Selection - █

```

There are several ways to access the UNIX operating system command environment. One way is to press the **HOME** key from any menu within the PRISM application. After you've used the **HOME** key to reach the UNIX environment, type **exit** when you are ready to return to the PRISM application.

Another way to reach the UNIX operating system command environment is to select option **4 3** from the PRISM Functions Menu displayed above. This screen appears after typing in 'prism' from the UNIX prompt or after exiting the PRISM application by entering selection **99** from any menu within the PRISM application.

## C-2.4 UNIX COMMANDS

The following chart identifies the most frequently used commands and options available at the UNIX operating system command prompt.

UNIX	Description
man xxx	display information about the command "xxx"
more file1	display file1 on the screen one page at a time (use space bar to advance to next page or `q' to quit)
cat file1	display file1 on the screen
cd	change directory to your \$HOME (root) directory
cd \$HOME/mydir	change directory to \$HOME/mydir
pwd	display current working directory
ls	display the list of files in the current directory
ls -al	list the files and their attributes in the current directory
cp file1 file2	copy file1 to file2 (both files will exist when complete)
mv file1 file2	move file1 to file2 (only file2 will exist when complete)
rm file1 env*	remove file1 and all files beginning with `env'
rm -i env*	remove all files beginning with `env' but first display the name of each file and ask if that file should be deleted
rm -r junkdir	remove directory junkdir and its contents
mkdir \$HOME/myjunk	create directory under \$HOME called myjunk
rmdir \$HOME/myjunk	remove directory under \$HOME called myjunk
vi file1	edit file1 using the UNIX vi editor (see next section)
lp file1	print file1 to local printer (80 Characters, portrait)
lpw file1	print file1 to local printer with compressed print (132 Characters, landscape)
lpr -Pmpr_laser -#2 file1	print file1 at print-station mpr_laser with 2 copies (-P(uppercase) station-name, -#=number of copies)
lprm file1	print file1 to remote CEAP system printer
user	display information about users on the UNIX machine
who	display list of all users currently logged on to the UNIX machine
history	display a list of the last few commands entered
!3	repeat the command numbered 3 in the history
!!	repeat the last command entered
echo \$ORACLE_SID	display the value of ORACLE_SID
env	display the current settings in your user environment
grep -v "[0-9]" file1	display all lines in file1 that do not begin with a digit
grep -i 'hi there' file1	display all lines in file1 that contain "hi there" or "HI THERE"
grep -n 'hi there' file1	display all lines and the line number in file1 that contain "hi there" or "HI THERE"
ps -ef   grep \$LOGNAME	display all active processes for your userid

## C-2.5 UNIX VI EDITOR

The UNIX VI Editor is a very powerful but hard to master editor. If you need to edit a file but find VI too cumbersome to learn, you may want to consider downloading the file to your PC and using your favorite PC based editor. The following are some of the most useful VI commands.

```

VistaCOM - (CORP220) -- Connected
File Edit Setup Terminal Interactive Transfer Diagnostics Watch Me Help
1
2 *****
3 *                      REPORT STATUS                      *
4 *****
5
6           Starting Time :  Thu Jul 15 17:05:42 GMT 1999
7
8           User ID       :  s0cwbegc
9           Report Name   :  fuslistrpt
10          Process ID    :  6058
11          Destination   :  File
12          Report Log     :  $HOME/reports/fuslistrptstat
13          Report Output  :  $HOME/reports/fuslistrpt_out
14          PRISM Software:  production
15          PRISM Database:  production
16
17 -----
18
19 ----- Report Input Data -----
20
21 C2001%%11 1N071598PHYNX                      1
22
23 ----- Message from the Report -----
"fuslistrptstat.1" 53/1431 (1 null)

```

- vi filename

*Example:*

The above screen is the result of entering the command **vi fuslistrptstat.1**. The filename (fuslistrptstat.1) shows on the lower left. Please keep in mind that this system is case sensitive.

**VI EDITOR (COMMON COMMANDS)**

<b>Operation</b>	<b>Key(s)</b>	<b>Description</b>
Edit File	vi file1	edit file1
Moving the Cursor	l, or right arrow	move one character to the right
"	h, or left arrow	move one character to the left
"	w	next word
"	b	previous word
"	e	end of current word to the right
"	\$	end of line
"	0 (zero)	beginning of line (cannot be used with a repeat factor)
"	Enter	beginning of next line
"	j or down arrow	down one line
"	-	beginning of previous line
"	k or up arrow	up one line
"	)	next sentence
"	(	previous sentence
"	}	next paragraph
"	}	previous paragraph
View different parts of file	Cntl - d	forward one-half screen
"	Cntl - u	backward one-half screen
"	Cntl - f	forward one screen
"	Cntl - b	backward one screen
"	nG	go to line n (without n, go to the last line in the file)
"	H	to the top of screen
"	M	to the middle of screen
"	L	to the bottom of screen
Adding Text	i	before cursor (press escape to exit)
"	I	before first nonblank character on line (press escape to exit)
"	a	after cursor (press escape to exit)
"	A	at end of line (press escape to exit)
"	o	open a line below the current line (press escape to exit)
"	O	open a line above the current line (press escape to exit)
Deleting and Changing Text	r	replace current character (no escape needed)
"	R	replace characters, starting with current character (overwrite until escape)
"	nx	delete the number of characters specified by n, starting with the current character (default n=1)
"	nX	delete n characters before the current character, starting with the character preceding the current character (default n=1)

Operation	Key(s)	Description
"	dM	delete text specified by M
Deleting and Changing Text	ndd	delete the number of lines specified by n (default n=1)
"	D	delete to end of the line
"	ns	substitute the number of characters specified by n (default n=1) (press escape to exit)
"	cM	change text specified by M (press escape to exit)
"	ncc	change the number of lines specified by n (press escape to exit)
"	C	change to end of line (press escape to exit)
Searching for a String	/text <b>Enter</b>	search forward for "text"
"	?text <b>Enter</b>	search backward for "text"
"	n	repeat original search exactly
"	N	repeat original search, opposite direction
"	/Enter	repeat original search forward
"	?Enter	repeat original search backward
String Substitution	:g/xx/s//yy/g	replace all occurrences of "xx" with "yy" (the g at the end indicates a global replacement)
Copying & Moving Text	:a,bco#	copy lines a through b after line # (\$ indicates end of file)
"	:a,bm#	move lines a through b after line # (\$ indicates end of file)
Undo	u	undo last change
Redo	. (period)	repeat last change
Leaving vi	:q!	exit vi without saving changes
"	:wq	save changes and then exit vi
"	:w	save changes and stay in vi

## C-2.6 LOGGING OUT

To properly log out from PRISM, do one of the following:

- From the PRISM FUNCTIONS MENU, select the menu choice “Logout”. You can get to the PRISM FUNCTIONS MENU from any other PRISM menu by entering choice 99.
- From the UNIX operating system command prompt (%) enter either **exit** or **logout**. This will not work, however, if you got to the UNIX environment using the **HOME** key in one of the PRISM menus, because in that case **exit** returns you to the PRISM menu from which you pressed the **HOME** key.

Please completely log off the ~~CEAP~~ CEEIS computer using one of the methods described above prior to exiting your communications software package (Vistacom, Signaterm, etc.).

If you exit without logging off, it may leave ORACLE jobs still running in the background which unnecessarily use up computer resources and can cause your files or database records to be 'busy'.